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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/771,563	02/04/2004	James B. Crews	304-27440-USC1	3720
24923	7590	10/11/2005		
PAUL S MADAN MADAN, MOSSMAN & SRIRAM, PC 2603 AUGUSTA, SUITE 700 HOUSTON, TX 77057-1130			EXAMINER METZMAIER, DANIEL S	
			ART UNIT 1712	PAPER NUMBER

DATE MAILED: 10/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/771,563

Applicant(s)

CREWS, JAMES B.

Examiner

Daniel S. Metzmaier

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 Feb. & 23 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,4-9 and 11-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4-9 and 11-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2/4/04.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

Claims 1, 4-9, and 11-13 are pending.

#### ***Drawings***

1. The drawings were received on 04 February 2004. These drawings are acceptable.

#### ***Specification***

2. The disclosure is objected to because of the following informalities: the cross-noting section of the specification should update the status of the parent application.

Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 4-7, 9, and 11-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Dawson et al, US 5,624,886. Dawson et al (examples) discloses the formation of gels employing hydroxypropyl guar and employs a breaker composition employing EDTA salts among other ingredients and cross-links the composition with zirconium lactate. Zirconium lactate is not a borate cross-linker. The claims do not exclude the further ingredients in the gel breaker.
5. Claims 1, 4-9, and 11-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Smith et al, US 5,224,546. Smith et al (example 2) discloses guar gels

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cross-linked with titanium complex and employing as a gel breaker EDTA in concentrations of about 1, 2, 3 or 4 pptg. Table 2 denotes the use of a 20% EDTA active set forth as gal. The estimated weight of a gal is about 12.15 lb. At 20% active, this equates to about 2.43. The use of 0.4 gal of 20% EDTA active/1000 gal fluid is about 1lb EDTA/1000gal fluid. The use of 0.8 gal of 20% EDTA active/1000 gal fluid is about 2lb EDTA/1000gal fluid. Gels cross-linked with titanium complex are absent a borate cross-linker.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 4-9, and 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang et al, US 5,981,447. Chang et al (example 1 and column 18, lines 60 et seq) discloses the addition of 0 to 100lbm/1000 gal (pptg) in a HEC (hydroxyethylcellulose) gel forming and breaking system.

Chang et al differs from the claims in the use of HEC rather than guar gum.

Chang et al (column 14, lines 13 et seq) discloses a number of guar and derivatized guar as suitable hydratable polymers useful in the disclosed systems.

It would have been obvious to one of ordinary skilled in the art at the time of applicants' invention to employ guar and/or derivatized guar as a hydratable polymer for

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forming the gels of Chang et al as an obvious functional equivalent of the HEC polymers exemplified for the art known gel forming function taught in the Chang et al reference.

***Response to Amendment***


8. Applicants' declaration evidence is not deemed to be commensurate in scope with the claims.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel S. Metzmaier whose telephone number is (571) 272-1089. The examiner can normally be reached on 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy P. Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Daniel S. Metzmaier  
Primary Examiner  
Art Unit 1712